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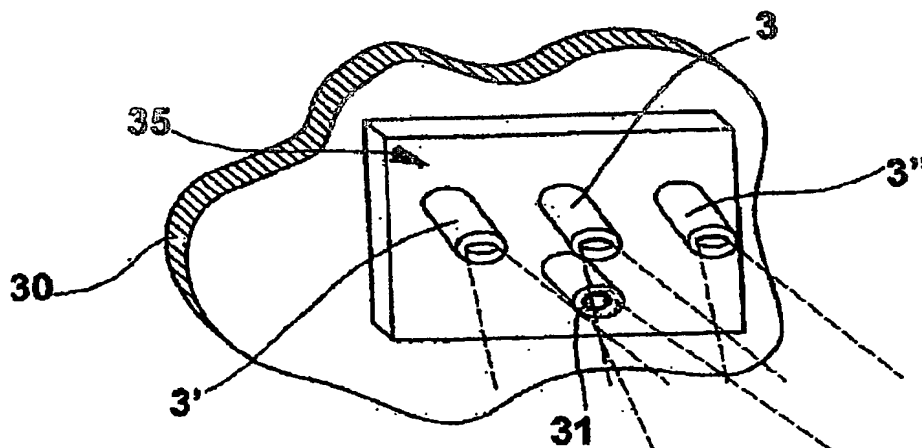
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[Continued on next page]

(54) Title: A BURNER AND GAS-INJECTION DEVICE



(57) Abstract: A burner and oxygen-injection device (35) for a melting furnace (30) comprising one or more injectors (3, 3', 3'') consisting of an internal pipe (1) and a head (2), which is fixed to one end of said hollow body and is provided with a nozzle (4) that sets the pipe (1) in communication with the outside. The nozzle has at least the outlet cross section (13) of a substantially oblong shape, in such a way that a subsonic flow of oxygen coming out of said nozzle will open in fanwise fashion, along an inclined plane containing an axis that is substantially horizontal and orthogonal to the axis of the nozzle. The injector (3) comprises holes (6) for injection of gaseous fuel, around said nozzle, arranged along the elongated sides of the outlet cross section of the nozzle. The device (35) also comprises a pipe for injection of carbon in powder form set underneath the nozzle or nozzles (3, 3', 3'').

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